What is claimed is:

1.   A method for measuring the signal transmission time through a network link bounded by an echo canceller comprising the steps of:

determining a signal transmission time along a network path between a first endpoint and a second endpoint (tA), said network path including said network link bounded by said echo canceller;

transmitting a test signal from said first endpoint to said second endpoint through said network path;

transmitting an echo signal from said second endpoint to said first endpoint through said network path, said echo signal simulating said test signal;

measuring a minimum time delay between transmission of said test signal and transmission of said echo signal which causes said echo canceller to cancel said echo signal; and

calculating the signal transmission time through said network link bounded by said echo canceller based on said measured minimum time delay and said determined network path signal transmission time (tA).

2.   A method as defined in Claim 1, wherein said network link is between said echo canceller and said first network path endpoint.

3.   A method as defined in Claim 1, wherein said network link is between said echo canceller and said second network path endpoint.

4.   A method as defined in Claim 1, wherein said network link is a packet network link of a voice call connection.

5.   A method as defined in Claim 1, wherein said minimum time delay is measured remote from said network link.

6. A method as defined in Claim 1, wherein said test signal and said echo signal are transmitted by at least one test apparatus capable of playing and recording digital files.

7. A method as defined in Claim 6, wherein said echo signal test apparatus varies the delay between transmission of said test signal and transmission of said echo signal.

8. A method as defined in Claim 7, wherein the delay between transmission of said test signal and transmission or said echo signal is swept from 0 msec to a value equal to said signal transmission time along said network path (tA).

9. A method as defined in Claim 7, wherein said echo signal is recorded at said first network path endpoint for each value of said delay until echo cancellation has occurred.

10. A method as defined in Claim 1, further comprising the steps of:
transmitting a second test signal from said second endpoint to said first endpoint through said network path;
transmitting a second echo signal from said first endpoint to said second endpoint through said network path, said second echo signal simulating said second test signal;
measuring a second minimum time delay between transmission of said second test signal and transmission of said second echo signal which causes a second echo canceller to cancel said second echo signal; and
calculating the signal transmission time through said network link based on said measured second minimum time delay and said determined network path signal transmission time (tA), wherein said network link is further bounded by said second echo canceller.

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11.   A method as defined in Claim 10, further comprising the step of calculating the signal transmission time between said second echo canceller and said first network path endpoint.

12.   A method as defined in Claim 10, further comprising the step of calculating the signal transmission time between said second echo canceller and said second network path endpoint.

13.   A method for measuring the delay through a network link bounded between a first and a second echo canceller comprising the steps of:
    determining a signal transmission time along a network path between a first endpoint and a second endpoint (tA), said network path including said network link bounded between said first and second echo cancellers;
    transmitting a first test signal from said first endpoint to said second endpoint through said network path;
    transmitting a first echo signal from said second endpoint to said first endpoint through said network path, said first echo signal simulating said first test signal;
    measuring a first minimum time delay between transmission of said first test signal and transmission of said first echo signal which causes said first echo canceller to cancel said first echo signal;
    transmitting a second test signal from said second endpoint to said first endpoint through said network path;
    transmitting a second echo signal from said first endpoint to said second endpoint through said network path, said second echo signal simulating said second test signal;
    measuring a second minimum time delay between transmission of said second test signal and transmission of said second echo signal which causes said second echo canceller to cancel said second echo signal; and
    calculating the delay through said network link bounded between said first and second echo cancellers based on said measured first and second minimum time delays and said determined network path signal transmission time (tA).

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14.   A method as defined in Claim 13, further comprising the step of calculating the signal transmission time between said first network path endpoint and said first echo canceller based on said measured first minimum time delay and said network path signal transmission time (tA).

15.   A method as defined in Claim 13, further comprising the step of calculating the signal transmission time between said second network path endpoint and said first echo canceller based on said measured first minimum time delay and said network path signal transmission time (tA).

16.   A method as defined in Claim 13, further comprising the step of calculating the signal transmission time between said first network path endpoint and said second echo canceller based on said measured second minimum time delay and said network path signal transmission time (tA).

17.   A method as defined in Claim 13, further comprising the step of calculating the signal transmission time between said second network path endpoint and said second echo canceller based on said measured second minimum time delay and said network path signal transmission time (tA).

18.   A method as defined in Claim 13, wherein said network link is a packet network link of a voice call connection.

19.   A method as defined in Claim 13, wherein said first and second minimum time delays are measured remote from said network link.

20.   A method as defined in Claim 13, wherein said first and second test and echo signals are transmitted by at least one test apparatus capable of playing and recording digital files.

21.	A method as defined in Claim 13, wherein said echo signal test apparatus varies the delay between transmission of said first and second test signals and transmission of said first and second echo signals.

22.	A method as defined in Claim 21, wherein said first and second delays are swept from 0 msec to a value equal to said signal transmission time along said network path (tA).

23.	A system for measuring the signal transmission time through a network link bounded by an echo canceller comprising:

a network path having a first endpoint, a second endpoint and a network link bounded by an echo canceller;

a test apparatus connected to said first network path endpoint for transmitting a test signal from said first endpoint to said second endpoint through said network path; and

a test apparatus connected to said second network path endpoint for transmitting an echo signal from said second endpoint to said first endpoint through said network path, said echo signal simulating said test signal,

wherein said test apparatus connected to said first network path endpoint records a minimum time delay between transmission of said test signal and transmission of said echo signal which causes said echo canceller to cancel said echo signal, said minimum time delay being used to calculate the signal transmission time through said network link bounded by said echo canceller.

24.	A system as defined in Claim 23, wherein said network link is a packet network link of a voice call connection.

25.	A system as defined in Claim 23, wherein said test apparatus connected to said first network path endpoint is remote from said network link.

26.	A system as defined in Claim 23, wherein said test apparatus is capable of playing and recording digital files.

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27.   A system as defined in Claim 23, wherein said test apparatus connected to said second network path endpoint varies the delay between transmission of said test signal and transmission of said echo signal.

28.   A system as defined in Claim 27, wherein said test apparatus connected to said second network path endpoint sweeps said delay from 0 msec to a value equal to a signal transmission time along said network path between said first and second endpoints (tA).

29.   A system as defined in Claim 28, wherein said test apparatus connected to said first network path endpoint records said echo signal for each value of said delay until echo cancellation has occurred.

30.   A system as defined in Claim 23, wherein said network path includes a network link bounded between a first and a second echo canceller.

31.   A system as defined in Claim 30, wherein said test apparatus connected to said second network path endpoint further transmits a second test signal from said second endpoint to said first endpoint through said network path and said test apparatus connected to said first network path endpoint further transmits a second echo signal from said first endpoint to said second endpoint through said network path, said second echo signal simulating said second test signal, and wherein said test apparatus connected to said second network path endpoint records a second minimum time delay between transmission of said second test signal and transmission of said second echo signal which causes said second echo canceller to cancel said second echo signal, said second minimum time delay being used to calculate the signal transmission time through said network link bounded between said first and second echo cancellers.